Message

From: Harris, Kimberly [harris.kimberly@epa.gov]
Sent: 5/1/2019 5:25:52 PM
To: rharrison@organco.org
CC: Tanaka, Joan [Tanaka.Joan@epa.gov]; Holst, Linda [holst.linda@epa.gov]
Subject: ATSDR/EPA Talking Notes for Health Value Differences & Chemours GenX data

Hi Richard,

It was a pleasure meeting you at the EPA-Region 5/Water Directors' conference. As promised, below are the talking points developed by EPA and CDC-ATSDR to explain the differences between the Agencies' PFAS health levels. I also tried to describe how the public might translate ATSDR's values into EPA's health advisories.

Additionally, I've pasted the links to EPA's request letters to Chemours & their GenX data generated in Feb 2018. Hope to contact you soon with the PFOA data.

Take care and safe travels,
Kim

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EPA Request to Chemours for GenX sampling in water supplies: https://www.epa.gov/pfas/request-sampling-genx-water-supplies
Chemours Washington Works Facility Results Feb. 2018: https://www.epa.gov/sites/production/files/2018-04/documents/hfpo_chemours_wash_works_sampling_2018.pdf

The differences between ATSDR's MRLs and EPA's Health Advisories

Federal agencies have a variety of tools that provide federal, state, tribal, and local governments; health professionals; and the public with information about how a chemical might affect a person's health. All of them can be used together to create a more complete picture of how to assess health risks and protect people from future exposures.

ATSDR's MRLs and EPA's Health Advisories (HAs) are two different tools that are used in different situations. MRLs are intended to be used to help public health professionals determine areas and populations potentially at risk for health effects from exposure to a particular chemical. An MRL is an estimate of the amount of a chemical a person can eat, drink, or breathe each day without a detectable risk to health. MRLs are unique to each substance. These are used as screening levels by public health professionals. MRLs do not define regulatory or action levels for ATSDR, nor for other agencies. When health assessors find human exposures are occurring at higher than the set MRL, it means that they may want to look more closely at the human

exposures. It does not mean that people will become sick from those exposures. ATSDR may work with EPA at a national or regional level to more fully examine these exposures. MRLs and HAs are presented in different units because MRLs are daily doses while HAs are concentrations. Mg/kg/day is a unit of daily dose, while ppt is a unit of concentration.

Drinking water HAs, on the other hand, provide information on contaminants that can cause human health effects and are known or anticipated to occur in drinking water. EPA uses reference doses (RfDs) to develop HAs. RfDs estimate a daily exposure to the human population (including sensitive subgroups, such as infants) that is likely to be without an appreciable risk of harmful effects *during a lifetime*. HAs are non-enforceable and provide technical guidance to states agencies and other public health officials who have the primary responsibility for overseeing drinking water systems, with information on the health risks of chemicals, so they can take the appropriate actions to protect their residents from harmful exposure.

How can ATSDR's MRLs be translated into health advisory values?
ATSDR's proposed MRLs are equivalent to EPA's oral reference doses (RfDs).

PFAS MRLs	(mg/kg day)
PFOA	3.00E-06
PFOS	2.00E-06
PFHxS	2.00E-05
PFNA	3.00E-06

In general, our health advisory calculation is as *follows: (RfD x body weight/drinking water intake) X [relative source contribution (RSC)]
ATSDR doesn't include RSC factors; however, if one were to convert ATSDR's MRLs to HAs (using RSC factors), then their PFOS and PFOA MRL values would translate to 7.0 ppt and 11.0 ppt, respectively (rounded).

*using the below assumptions & factors:
body weight/water intake (lactating women)= 0.054 L/kg-day
RSC= 20%
PFOA & PFOS RfDs = 0.00002 mg/kg/day